Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

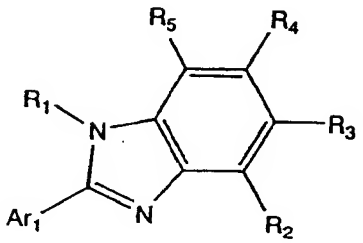
Listing of Claims

1. (Original) An electroluminescent element comprising:

a pair of electrodes; and

host materials and guest materials provided between said electrodes and having in their molecules respectively skeletons represented by the general formula 1:

Formula 1



. . . (1)

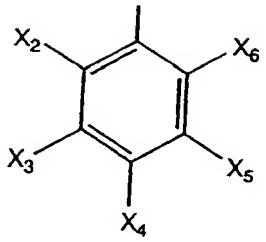
wherein R1 is a hydrogen atom, a lower alkyl group, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent, R2 to R5, each of which may be the same or different, are individually a hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, an acyl group, a nitro group, a cyano group, an amino group, a dialkylamino group, a diarylamino group, a vinyl group which may have a substituent, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent, and Arl is an aryl group which may have a substituent, or a heterocyclic group which may have a substituent.

2. (Original) An electroluminescent element comprising:

a pair of electrodes;

host materials provided between said electrodes and having in its molecule skeletons represented by the general formula 2:

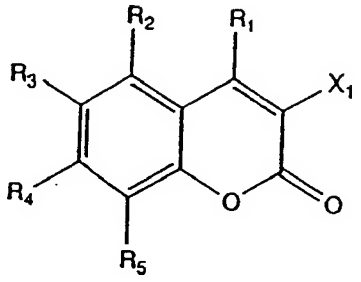
Formula 2



· · · (2)

and guest materials provided between said electrodes and having in its molecules skeletons represented by the general formula 3:

Formula 3

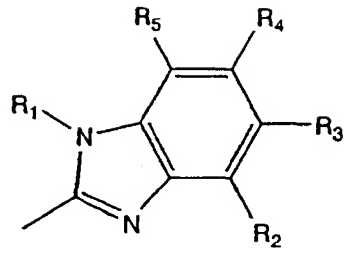


· · · (3)

wherein R1 is a hydrogen atom, a lower alkyl group, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent, and R2 to R5, each of which may be the same or different, are individually a hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, an acyl group, a nitro group, a cyano group, an amino group, a dialkylamino group, a diarylamino group, a vinyl group which may have a substituent, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent;

wherein at least one substituent out of substituents X1 to X6 represented by the general formula 2 and a substituent X1 represented by the general formula 3 have an imidazole skeleton represented by the general formula 4:

Formula 4



. . . (4)

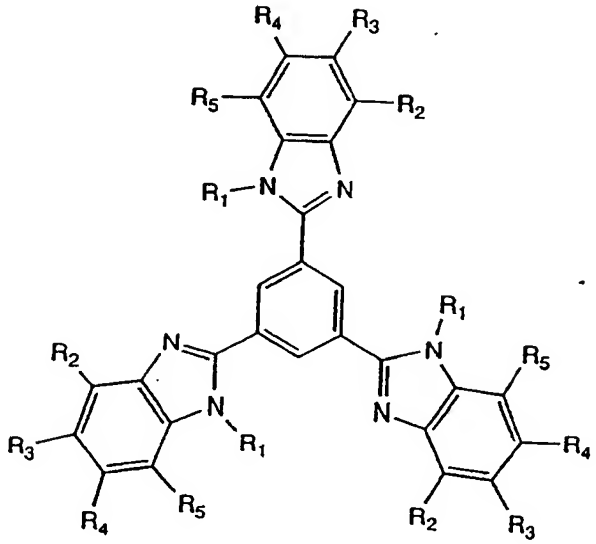
wherein R1 is a hydrogen atom, a lower alkyl group, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent, and R2 to R5, each of which may be the same or different, are individually a hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, an acyl group, a nitro group, a cyano group, an amino group, a dialkylamino group, a diarylamino group, a vinyl group which may have a substituent, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent.

3. (Currently Amended) An electroluminescent element comprising:

a pair of electrodes;

a compound provided between said electrodes as host materials represented by the general formula 5:

Formula 5

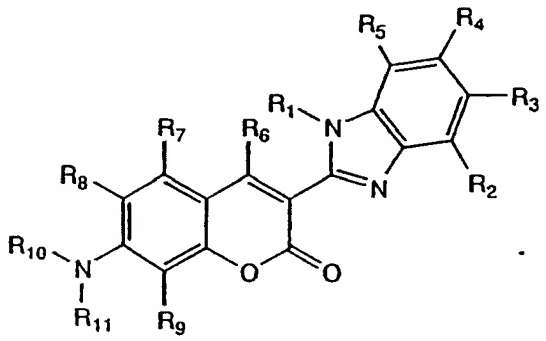


. . . (5)

wherein R1 is a hydrogen atom, a lower alkyl group, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent, and R2 to R5, each of which may be the same or different, are individually a hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, an acyl group, a nitro group, a cyano group, an amino group, a dialkylamino group, a diarylamino group, a vinyl group which may have a substituent, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent;

and a compound provided between said electrodes as guest materials represented by the general formula 6:

Formula 6



wherein R1 is a hydrogen atom, a lower alkyl group, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent, R2 to R9, each of which may be the same or different, are individually a hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, an acyl group, a nitro group, a cyano group, an amino group, a dialkylamino group, a diarylamino group, a vinyl group which may have a substituent, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent, and R10 and R11 are individually a hydrogen atom, a lower alkyl group, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent, and [[.]]

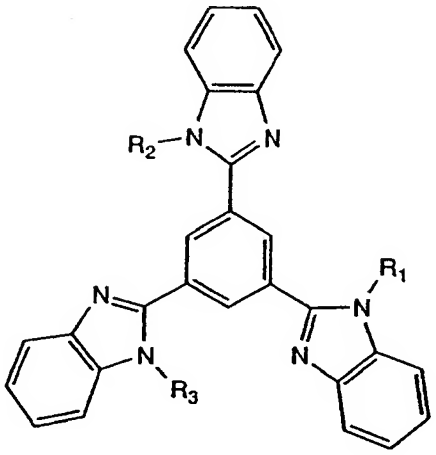
wherein R8 and R10, and R9 and R11, may be bonded each other to form a substituted or nonsubstituted saturated six-membered ring.

4. (Currently Amended) An electroluminescent element comprising:

a pair of electrodes;

a compound provided between said electrodes as host materials represented by the general formula 7:

Formula 7

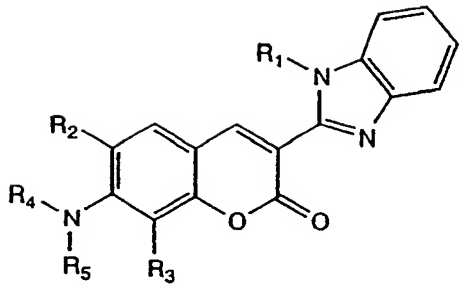


. . . (7)

wherein R1 to R3, each of which may be the same or different, are individually a hydrogen atom, a lower alkyl group, an aryl group, or a heterocyclic group;

and a compound provided between said electrodes as guest materials represented by the general formula 8:

Formula 8



... (8)

wherein R1 is a hydrogen atom, a lower alkyl group, an aryl group, or a heterocyclic group, R2 and R3, each of which may be the same or different, are individually a hydrogen atom, or a lower alkyl group, and R4 and R5, each of which may be the same or different, are individually a hydrogen atom, a lower alkyl group, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent, and [[.]]

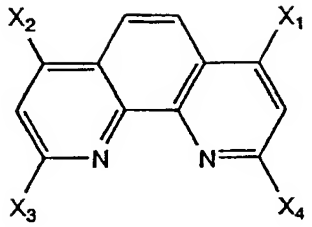
wherein R2 and R4, and R3 and R5, may be bonded each other to form a substituted or nonsubstituted saturated six-membered ring.

5. (Original) An electroluminescent element comprising:

a pair of electrodes; and

host materials and guest materials provided between said electrodes and having in their molecule skeletons represented by the general formula 9:

Formula 9

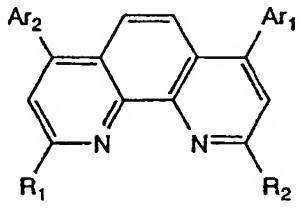


wherein X1 to X4, each of which may be the same or different, are individually a hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, an acyl group, a nitro group, a cyano group, an amino group, a dialkylamino group, a diarylamino group, a vinyl group which may have a substituent, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent.

6. (Original) An electroluminescent element comprising: a pair of electrodes;

a compound provided between said electrodes as host materials represented by the general formula:

Formula 10

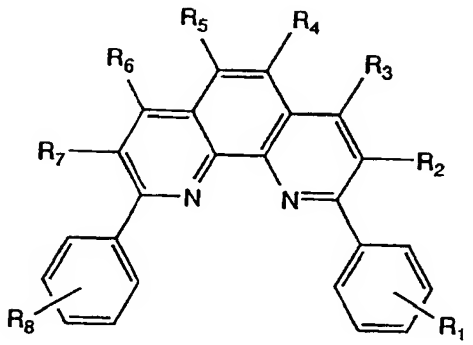


wherein Arl and Ar2, each of which may be the same or different, are individually an aryl group which may have a substituent, or a heterocyclic group which may have a substituent, and

R1 and R2, each of which may be the same or different, are individually a hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, an acyl group, a nitro group, a cyano group, an amino group, a dialkylamino group, a diarylamino group, a vinyl group which may have a substituent, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent;

and a compound provided between said electrodes as guest materials represented by the general formula 11:

Formula 11



. . . (11)

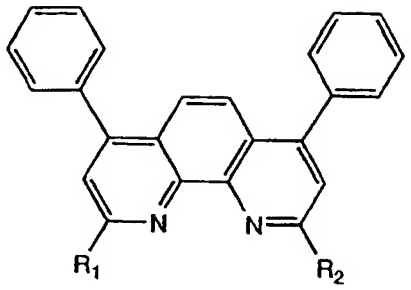
wherein R1 to R8, each of which may be the same or different, are individually a hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, an acyl group, a nitro group, a cyano group, an amino group, a dialkylamino group, a diarylamino group, a vinyl group which may have a substituent, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent.

7. (Currently Amended) An electroluminescent element comprising:

a pair of electrodes;

a compound provided between said electrodes as host materials represented by the general formula 12: [[;]]

Formula 12

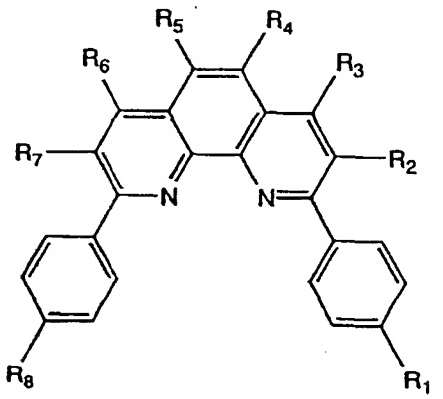


· · · (12)

wherein R1 and R2, each of which may be the same or different, are individually a hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, an acyl group, a nitro group, a cyano group, an amino group, a dialkylamino group, a diarylamino group, a vinyl group which may have a substituent, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent;

and a compound provided between said electrodes as guest materials represented by the general formula 13:

Formula 13



· · · (13)

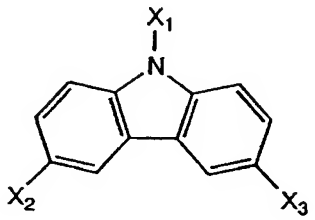
wherein R1 to R8, each of which may be the same or different, are individually a hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, an acyl group, a nitro group, a cyano group, an amino group, a dialkylamino group, a diarylamino group, a vinyl group which may have a substituent, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent.

8. (Original) An electroluminescent element comprising:

a pair of electrodes; and

host materials and guest materials having in their molecule skeletons represented by the general formula 14:

Formula 14



. . . (14)

wherein X1 to X3, each of which may be the same or different, are individually a hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, an acyl group, a nitro group, a cyano group, an amino group, a dialkylamino group, a diarylamino group, a vinyl group which may have a substituent, an aryl group which may have a substituent, or a heterocyclic group which may have a substituent.

9. (New) An electroluminescent element according to claim 4 wherein said electroluminescent element is incorporated into one selected from the group consisting of a display device, a computer, an image reproduction device including a recording medium, a goggle type display, a camera, and a cellular phone.

10. (New) An electroluminescent element according to claim 4 wherein one of said electrodes is an anode.

11. (New) An electroluminescent element according to claim 10 wherein said anode comprises a material selected from the group consisting of indium tin oxide, indium zinc oxide composed of indium oxide mixed with zinc oxide, aurum, platinum, nickel, tungsten, chrome, molybdenum, ferrum, cobalt, copper, palladium, and nitride of metal material.

12. (New) An electroluminescent element according to claim 4 wherein the other of said electrodes is a cathode.

13. (New) An electroluminescent element according to claim 12 wherein said cathode comprises a material selected from the group consisting of alkaline metal, alkaline earth metal, alloy thereof, and compound thereof.

14. (New) An electroluminescent element according to claim 12 wherein said cathode comprises a material selected from the group consisting of Li, Cs, Mg, Ca, Sr, Mg:Ag, Al:Li, LiF, CsF and CaF_2.

15. (New) An electroluminescent element according to claim 4 wherein each of said electrodes has a thickness of 10 to 500 nm.

16. (New) An electroluminescent element according to claim 4 wherein at least one of said electrodes comprises a material having light transmission properties.

17. (New) An electroluminescent element according to claim 4 wherein said compound provided between said electrodes as said host materials is provided in a light-emitting layer, and wherein said compound provided between said electrodes as said guest materials is provided in said light-emitting layer.

18. (New) An electroluminescent element according to claim 4 further comprising an electron transporting layer provided between said electrodes.

19. (New) An electroluminescent element according to claim 4 further comprising a hole injecting layer provided between said electrodes.

20. (New) An electroluminescent element according to claim 4 further comprising a hole blocking layer provided between said electrodes.

21. (New) An electroluminescent element according to claim 17 wherein said light-emitting layer is provided over one of said electrodes which is an anode, and wherein the other of said electrodes which is a cathode is provided over said light-emitting layer.

22. (New) An electroluminescent element according to claim 17 wherein said light-emitting layer is provided over one of said electrodes which is a cathode, and wherein the other of said electrodes which is an anode is provided over said light emitting layer.

23. (New) An electroluminescent element according to claim 17 further comprising an electron transporting layer provided over said light-emitting layer wherein said light-emitting layer is provided over one of said electrodes which is an anode, and wherein the other of said electrodes which is a cathode is provided over said electron transporting layer.

24. (New) An electroluminescent element according to claim 17 further comprising a hole injecting layer provided over one of said electrodes which is an anode wherein said light-emitting layer is provided over said hole injecting layer, and wherein the other of said electrodes which is a cathode is provided over said light-emitting layer.